17 March 1955

MEMORANDUM FOR THE RECORD

SUBJECT: Speech Fabrication

- 1. Attached are tracings of a section of a film track recording of a word spoken twice by two different persons.
- 2. Person (A) spoke the word almost identically both times with a slow drawl.
 - 3. Person (B) spoke the word a little sharper.
- 4. It will be noted that when a word is spoken by two different people it will be recorded on the sound film track with similar but different black and white serrations.
- 4. If the original sound track containing the word is photographically enlarged to the size shown in attachment and then reduced photographically to normal sound track size, the resultant sound track should reproduce the word for all practical purposes exactly as on the original sound track.
 - 5. The question arises, can all the variations of black and white produced by the sound on the original track be seen in an optical enlargement for the purposes of copying the sound track by hand. It appears possible that this can be done. Frayne and Wolfe, in "Sound Recording", Page 334, reports that in variable area sound tracks "the black areas should be perfectly opaque and the clear areas perfectly transparent. With no gradation of density at the edges of the exposed area and no difusion of image into the clear area".
 - 6. Examination of sound tracks, containing words, in the CIA photo lab shows in enlargements of 25 times, as shown in attachment, and up to 100 times, observed visually a perfect demarcation line between black and white which it appears could be traced with sufficient accuracy to reproduce a word that would be indistinguishable from the original.

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Declassified in Part - Sanitized Copy Approved for Release 2014/06/20: CIA-RDP78-03153A002000120004-5 SAME WORD SPOKEN BY PERSON (B)